		CES G			AMENI	FO DED REPOR	RM 3								
APPLICATION FOR PERMIT TO DRILL										1. WELL NAME and NUMBER Three Rivers 32-32-720					
2. TYPE OF	WORK	DRILL NEW WELL	REENTER	P&A WELI	L DEEPEN	WELL [	)		3. FIELD C	R WILDC	AT WILD	CAT			
4. TYPE OF	WELL	Oi			hane Well: NO	-	~		5. UNIT or	COMMUN	IITIZATION	AGREEM	ENT NAM	1E	
6. NAME OF	OPERATOR			NERGY LL					7. OPERATOR PHONE 720 746-5200						
8. ADDRESS	S OF OPERAT		30 Larimer Ste 4						9. OPERA				m		
10. MINERA	L LEASE NUM				INERAL OWNERS	SHIP			12. SURFA						
	INDIAN, OR S				CT0	DIAN 🔲	) STATE	FEE 📵	FEDERA	ATT-1	NDIAN 🛑	STATE	_ F	EE 📵	
13. NAME C	OF SURFACE	OWNER (if box 12 =	= 'fee') Kenneth Joe	& Dianne	C. Batty				14. SURFA	CE OWN	ER PHONE 435-78		= 'fee')		
15. ADDRES	SS OF SURFA	CE OWNER (if box	<b>12 = 'fee')</b> 1600 North	n 1500 We	est, ,				16. SURFA	CE OWN	ER E-MAIL	(if box 12	= 'fee')		
17. INDIAN (if box 12 =		R TRIBE NAME			TIPLE FORMATIO	NS	PRODUCTION FRO	_	19. SLAN		DIRECTION	AL 📵 🕒	IORIZON	ral 🔵	
20. LOCAT	ION OF WELL			FOOTAG	ES	QT	TR-QTR	CTION	том	NSHIP	10	NGE	МЕ	ERIDIAN	
LOCATION	I AT SURFACE		1609	FNL 25	13 FEL		SWNE		7.	0.5	20	0.0 E		S	
Top of Up	permost Prod	ucing Zone	1872	2 FNL 19	80 FEL	SWA 32			0 S 2		20.0 E S		S		
At Total D	epth		1872	2 FNL 19	80 FEL			32	7.	0 S	20	0.0 E		S	
21. COUNT	Υ	UINTAH		22. D	ISTANCE TO N	RES.	EAS LINE (Feet)	T	23. NUMBI	ER OF AC	RES IN DRI		IT		
				25. Di (App		R of W or Com	/ELLIN SAME BOO pleted)	<b>26. PROPOSED DEPTH</b> MD: 7378 TVD: 7326							
27. ELEVAT	TION - GROUN	<b>D LEVEL</b> 4793			OND MBER	LPM90	046682	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 49-2262 - RNI at Green River					LE		
			7		Hole Casing	, and C	Cement Informa	tion	•						
String	Hole Size	Casing Size	Lengti	Weight.	Grade & Th	read	Max Mud Wt		Cement Sacks Yield Weigh						
Surf	11	8.625	0-3300	24.0	J-55 LT8	\$С	8.7	Pre	mium Lite	High Stre	ength	145	2.97	11.5	
									Clas	s G		115	1.16	15.8	
Prod	7.875	50	7378	17.0	J-55 LT8	&C	9.2	Pre	mium Lite	High Stre	ength	435	2.25	12.0	
					А	TTACH	IMENTS								
	VER	IFY THE FOLLO	WING ARE ATT	ACHED	IN ACCORDAN	ICE WI	TH THE UTAH O	IL AND GAS	S CONSER	VATION	GENERA	L RULES			
<b>W</b> EI	LL PLAT OR M	AP PREPARED BY L	ICENSED SURVE	YOR OR E	ENGINEER		COMPLET	E DRILLING I	PLAN						
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)  FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER															
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)  TOPOGRAPHICA								PHICAL MAP	МАР						
NAME Don	Hamilton		TITLE Permittin	g Agent (E	Buys & Associates	s, Inc)				PHONE 4	435 719-20	018			
SIGNATUR	E		<b>DATE</b> 04/10/2	013						EMAIL st	tarpoint@e	tv.net			
API NUMBER ASSIGNED 43047537120000 APPROVAL															

## **DRILLING PLAN**

Axia Energy, LLC
Three Rivers Project
Three Rivers #32-32-720
SWNE Sec 32 T7S R20E
Uintah County, Utah

## 1. ESTIMATED FORMATION TOPS

FORMATI	ON	TOP (TVD)	COMMENTS
Uinta		Surface	Gas & Degraded Oil; Possibh Brackish H₂O
Green River		3,148′	Oil & Associated Gas
Lower Gre	een River*	5,143′	Oil & Associated Ga
Wasatch*	:	7,026′	Oil & Associatet Gas
TD	7,378' (MD)	7,326' (TVD)	

NOTE: Datum, Ground Level (GL) Elevation, 1,79; A terisks (1) denotes target pay intervals

A) The State of Utah, Division of Oil, Sas and Uning will be notified within 24 hours of spudding the well.

### 2. CASING PROGRAM

CASING	OLE 7E	DELTH SET (MD)	CSG SIZE	WGHT	GRD	THRD	CAPACITY (bbl/ft)
CONDUCTOR		50-75	13 3/8				
SURFACE	11	1300 ±	8 %	24.0	J-55	LTC	0.0636
PRODUCTION	7 %	7,378′	5 ½	17.0	J-55	LTC	0.0232

NOT: All casing depth intervals are to surface unless otherwise noted.

#### Casing Specs

SIZE (in)	<b>ID</b> (in)	DRIFT DIA (in)	COLLAPSE RESISTANCE (psi)	INTERNAL YIELD (psi)	TENSILE YIELD (lbs)	JOINT STRENGTH (lbs)
8 %	8.097	7.972	1,370	2,950	381,000	244,000
5 ½	4.892	4.767	4,910	5,320	273,000	247,000

<sup>\*</sup>The State of Utah will be notified 24 hours prior to running casing, cementing, and BOPE testing

#### **FLOAT EQUIPMENT**

SURFACE (8 5/8): Float Shoe, 1 JNT Casing, Float Collar

1st 4 Joints: every joint

Centralizers:

Remainder: every third joint

PRODUCTION (5 1/2): Float Shoe, 1 JNT Casing, Float Collar

Centralizers: 1<sup>st</sup> 4 Joints: every joint

Remainder: every third joint 500' into surface casing

NOTE: 5 1/2" 17# N-80 or equivalent marker collar or casing joints will be placed at the top of the Green

River and approximately 400' above the Wasatch.

### 3. <u>CEMENT PROGRAM</u>

CONDUCTOR (13 3/8): Ready Mix – Cement to surface

SURFACE (8 5/8): Cement Top: Surface

Lead: 145 sks, Premium Lightweight Cmt w/ additives, 11.50 ppg, 2.97

cf/sk, 50% excess

Tail: 115 sks Clas & Oerient w/addit ves, 15.80 ppg, 1.16 cf/sk, 50%

exc

NOTE: The above volumes are based on galle-lole + 50% exces

435 sacks – Light Premium Cement w/ additives – 12.0 ppg, 2.25

73/sk – 20% excess

NOTE: The above volumes are based on gauge hole + 20% excess. Adjustments will be made and volumes will be caliper +

10%.

NOTE: The above volumes are based on a gauged-hole. Adjustments will be made based on caliper.

A) For Surface casing, if cement falls or does not circulate to surface, cement will be topped off.

- B) Cement will not be placed down annulus with a 1" pipe unless the State of Utah is contacted.
- c) The State of Utah will be notified 24 hours prior to running casing and cementing.

#### 4. PRESSURE CONTROL EQUIPMENT

- A) The State of Utah, Division of Oil, Gas and Mining will be notified 24 hours prior to all BOPE pressure tests.
- **B)** The BOPE shall be closed whenever the well is unattended.
  - a) All BOPE connections subjected to well pressure will be flanged, welded, or clamped.
  - b) Choke Manifold:

- i) Tee blocks or targeted 'T's will be used and anchored to prevent slip and reduce vibration.
- ii) Two adjustable chokes will be used in the choke manifold.
- iii) All valves (except chokes) in kill line choke manifold and choke line will not restrict the flow.
- iv) Pressure gauges in the well control system will be designed for drilling fluid.

#### c) BOPE Testing:

- a) BOPE shall be pressure tested when initially installed, whenever any seal subject to pressure testing is broken, or after repairs.
- b) All BOP tests will be performed with a test plug in place.
- c) BOP will be tested to full stack working pressure and annular preventer to 50% stack working pressure.

INTERVAL	BOP EQUIPMENT						
0 - 1300 ±	11" Diverter with Rotating Head						
1300 ± - TD	3,000# Ram Double BOP & Annular with Divers & Rotating Head						
NOTE: Drilling spool to accommodate choke and kill lines.							

#### 5. MUD PROGRAM

- A) Mud test will be performed at least every 24 horse and after mudding up to determine density, viscosity, gel strength, filtration, and pH
- B) Gas-detecting equipment will be installed and operated in the mud-return system from top of Green River Formation to TD.
  - a) Flare line discharge will be looked no less than 100 feet from the wellhead using straight or targeted 'T's and each ors.

INTERVAL	ID V GHT	WSC	FLUID LOSS	COMMENTS	_
SURF – 1300	814 – 87 ppg	32	NC	Spud Mud	
1300 ± - TD	8.6 – 9.2 ppg	40	NC	DAP/Gel	
NOTE MUSIC	ht beroeses will be	diractad	by bala condition	6	

NOTE Multiveight increases will be directed by hole conditions.

### 6. ABNORMAL CONDITIONS

- A) No abnormal pressures or temperatures are anticipated.
  - a) Estimated bottom hole pressure at TD will be approximately 3,172 psi (normal pressure gradient: 0.433 psi/ft).
  - b) Estimated maximum surface pressure will be approximately 1,612 psi (estimated bottom hole minus pressure of partially evacuated hole (gradient: 0.220 psi/ft)).
- B) No hydrogen sulfide is anticipated.

INTERVAL	CONDITION						
SURF - 1300 ±	Lost Circulation Possible						
1300 ± – TD	Lost Circulation Possible						

### 7. **AUXILIARY EQUIPMENT**

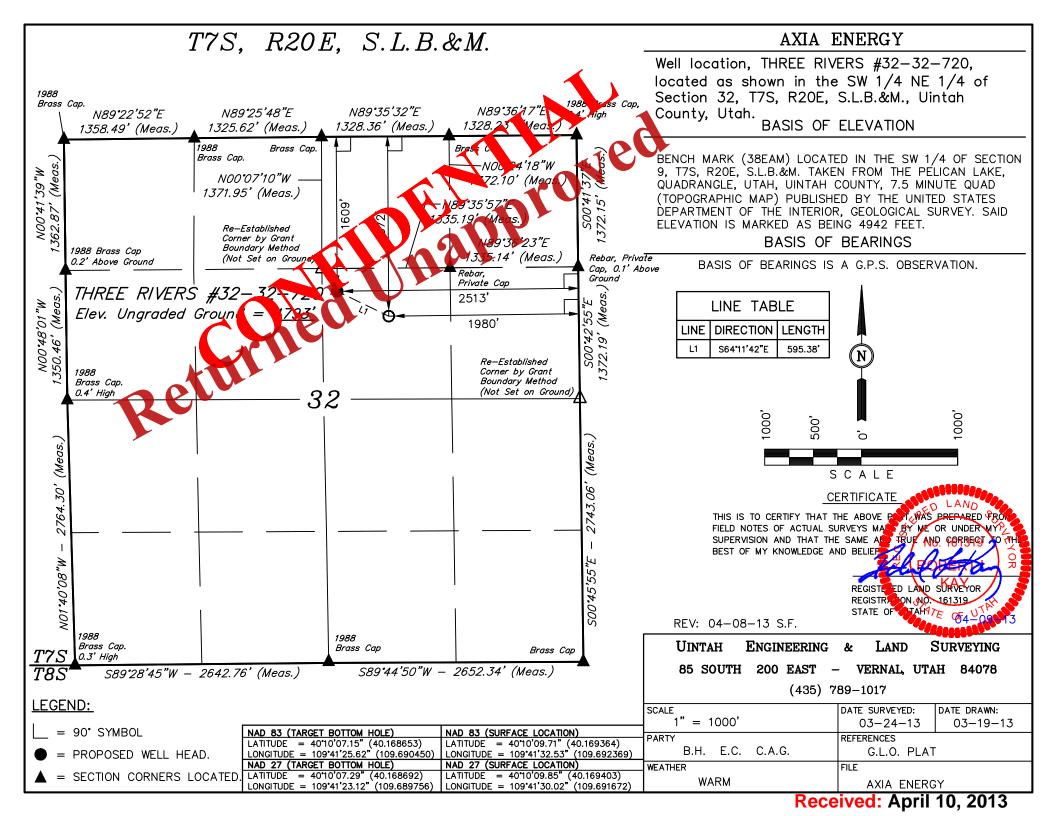
- A) Choke Manifold
- B) Upper and lower kelly cock with handle available
- c) Stabbing valve
- **D)** Safety valve and subs to fit all string connections in use

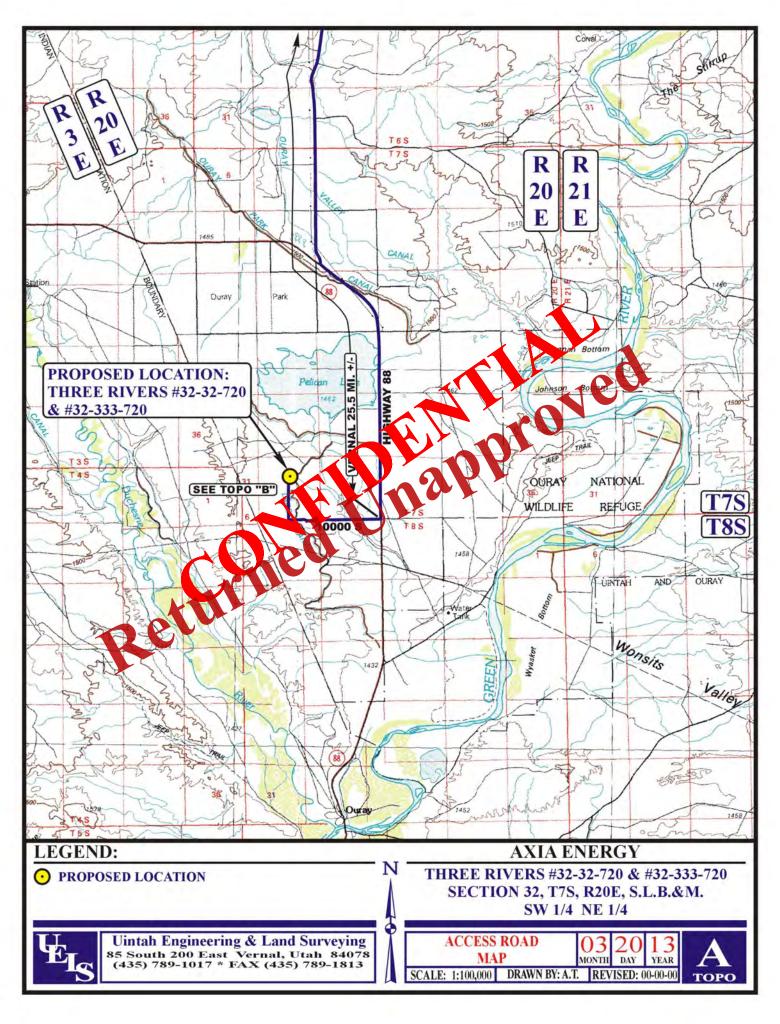
### 8. SURVEY & LOGGING PROGRAMS

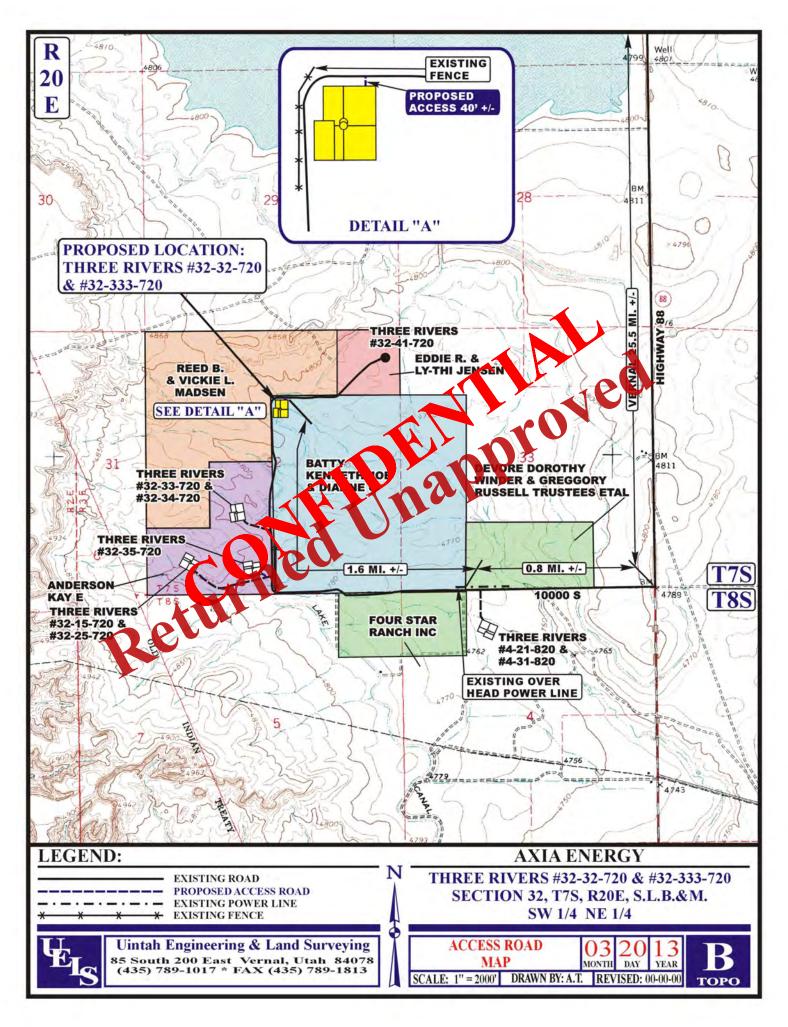
- A) Cores: None anticipated.
- **B)** Testing: None anticipated.
- c) Directional Drilling: Directional tools will be used to locate the bottom hole per the attached directional plan +/-.
- D) Open Hole Logs: TD to surface casing: resistivity, neutron density, gairma ra and caliper.
- E) Mud Logs: Computerized 2-person logging unit will catch and describe 10 pot samples from top of Green River Formation to TD; record and monitor gas shows and record drill times (normal mud logging duties).

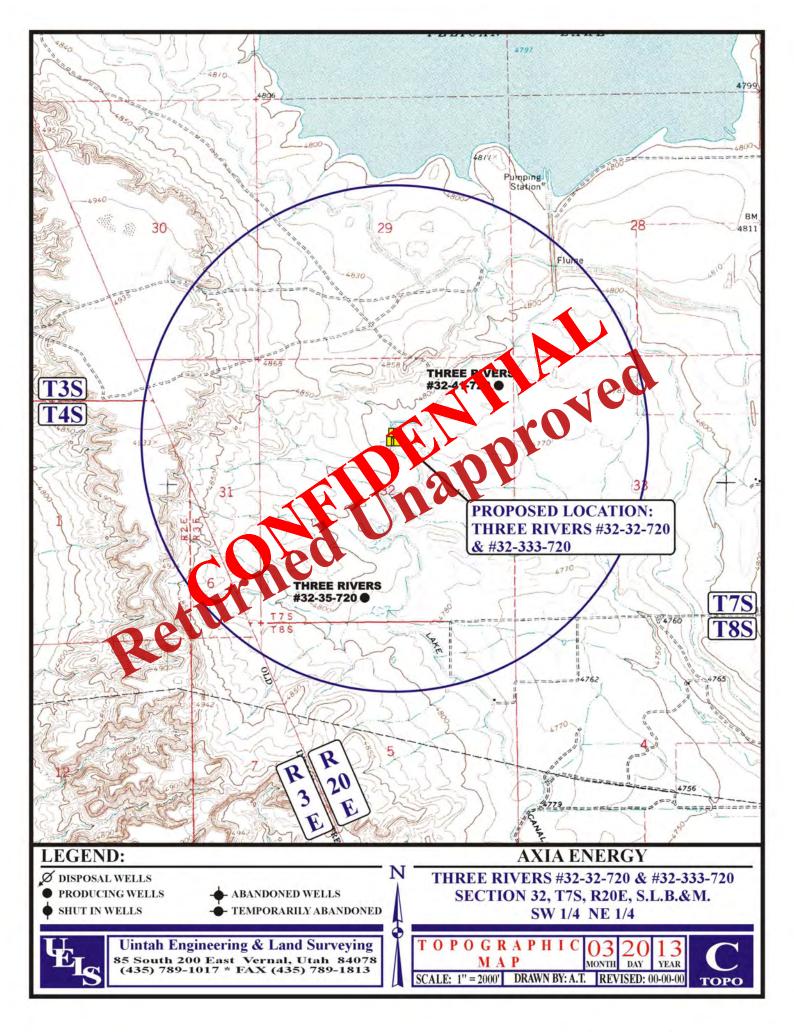
## 9. HAZARDOUS MATERIALS

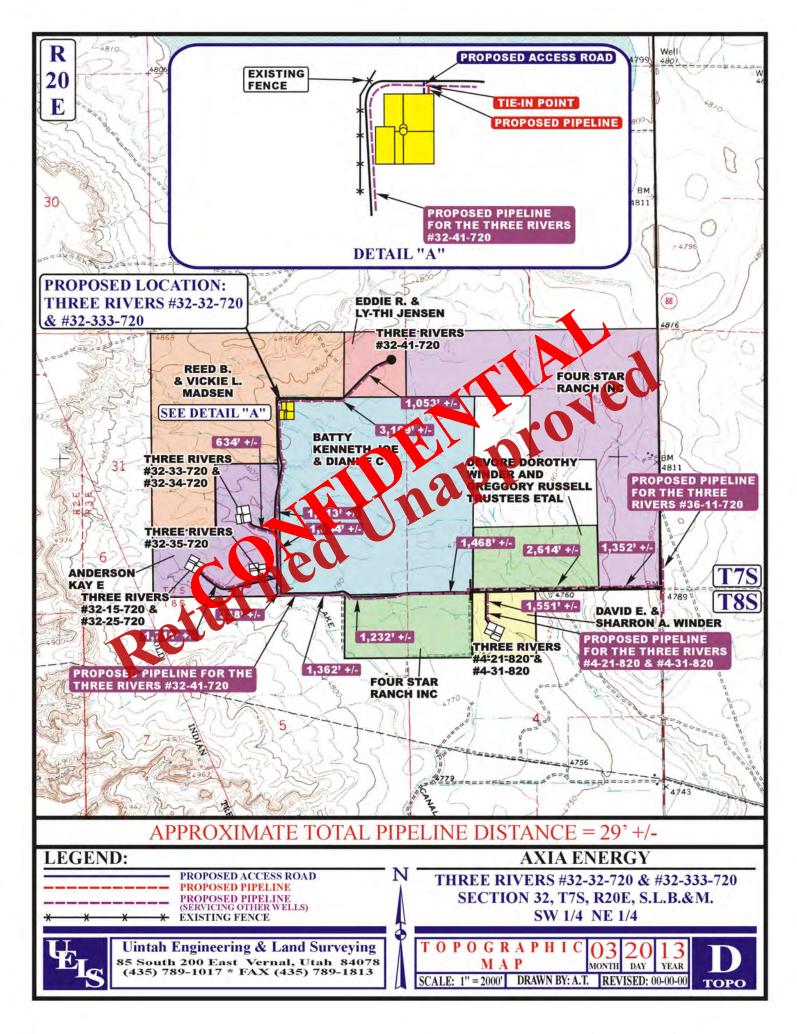
In accordance with Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, no chemicals subject to reporting in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually places ration with the drilling of this well.

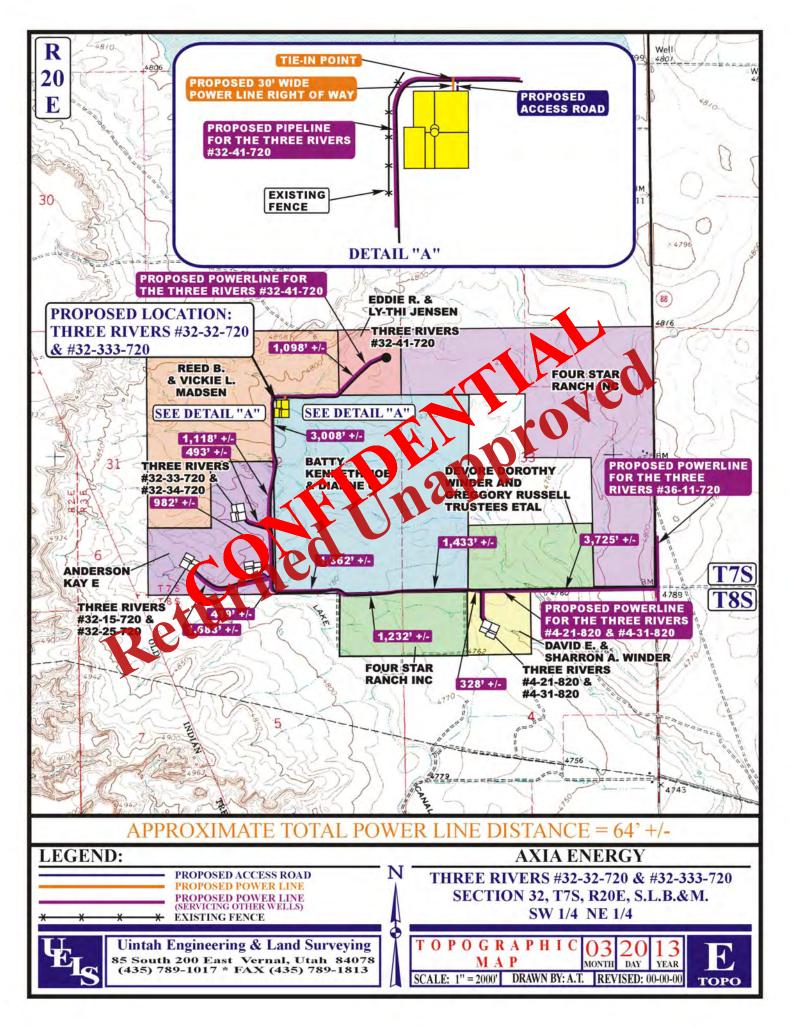


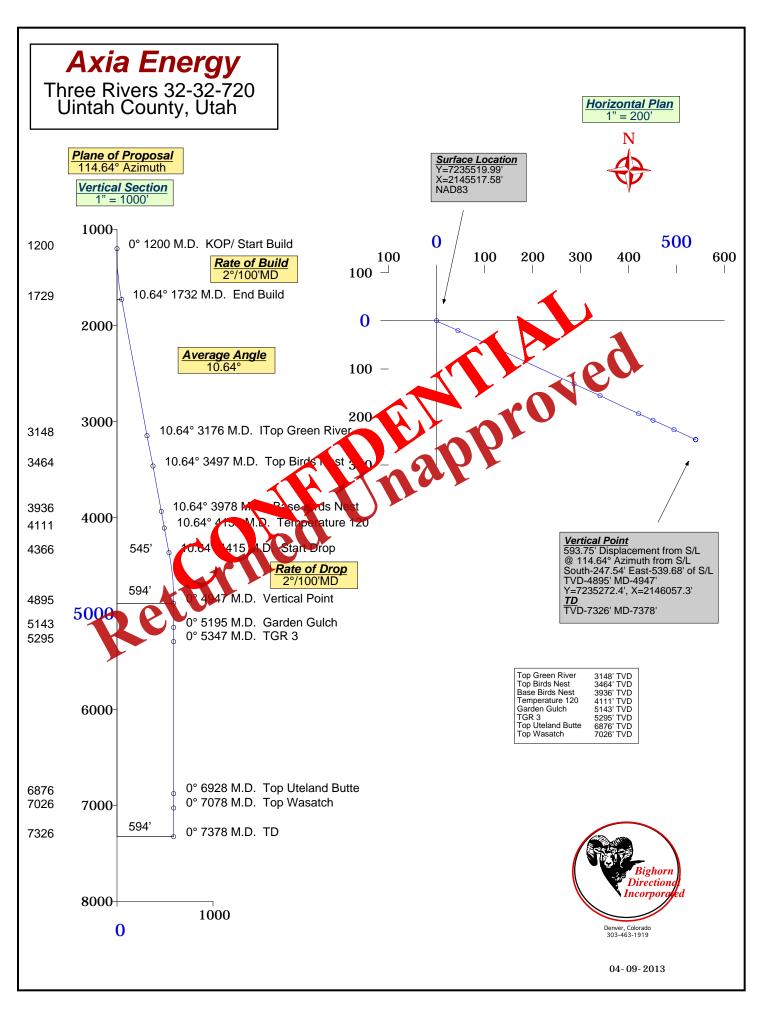












# Bighorn Directional, Inc.

Axia Energy Three Rivers 32-32-720 Uintah County, Utah



Minimum of Curvature Slot Location: 7235519.99', 2145517.58' Plane of Vertical Section: 114.64°

Page: 1

•			True	RECTANGU	LAR	LAMB	ERT				
Measured	BORE	HOLE	Vertical	COORDINA	TES	COORDI	N A T	Vertical	CLOSU	RES	Dogleg
Depth	Inc	Direction	Depth	North(-South) East	t(-West)	Υ	X	Section	Distance Di	rection	Severity
Feet	Degrees	Degrees	Feet	Feet Fee	t	Feet	F	Feet	Feet D	Deg	Deg/100'
1200.00	0.00	0.00	1200.00	0.00	0.00	72 5520.0	2145517.6	0.00	0.00	0.00	0.00
KOP/ Start Bui						<b>₹'                                    </b>	41				
1300.00	2.00	114.64	1299.98	-0.73	1.59	₹2355 <i>3</i> .3	2145519.2	1.75	1.75	114.64	2.00
1400.00	4.00	114.64	1399.84	-2.91	6.34	,_35517.1	2145523.9	6.98	6.98	114.64	2.00
1500.00	6.00	114.64	1499.45	-6.54	4)26 2 34	7235513.4	2145531.8	15.69	15.69	114.64	2.00
1600.00	8.00	114.64	1598.70	-11.62	2 34	7235508.4	2145542.9	27.88	27.88	114.64	2.00
1700.00	10.00	114.64	1697.47	-18.1	39.56	7235501.8	2145557.1	43.52	43.52	114.64	2.00
1731.79	10.64	114.64	1728.74	-20.52	44.73	7235499.5	2145562.3	49.22	49.22	114.64	2.00
End Build											
2231.79	10.64	114.64	2220.15	-5.99	128.62	7235461.0	2145646.2	141.50	141.50	114.64	0.00
2731.79	10.64	114.64	2711.5	97.47	212.50	7235422.5	2145730.1	233.78	233.78	114.64	0.00
3175.86	10.64	114.64	314 3.00	- 31.54	287.00	7235388.3	2145804.6	315.75	315.75	114.64	0.00
ITop Green Riv	/er										
0004.70	40.04	44404	000007	405.04	000.00	7005004.0	04.4504.4.0	000.07	000.07	44404	0.00
3231.79	10.64	114.64	202.97	-135.94	296.38	7235384.0	2145814.0	326.07	326.07	114.64	0.00
3497.38	10.64	114.64	3464.00	-156.38	340.94	7235363.6	2145858.5	375.09	375.09	114.64	0.00
Top Birds Nest			2004.20	474.40	200.20	7005045.0	04.45007.0	440.05	440.05	44404	0.00
3731.79	10.64	114.64	3694.38	-174.42	380.26	7235345.6	2145897.8	418.35	418.35	114.64	0.00
3977.63 Base Birds Ne	10.64	14.64	3936.00	-193.34	421.50	7235326.6	2145939.1	463.73	463.73	114.64	0.00
4155.69	10.64	114.64	4111.00	-207.04	451.38	7235312.9	2145969.0	496.59	496.59	114.64	0.00
		114.04	4111.00	-207.04	431.36	7233312.9	2143909.0	490.59	490.39	114.04	0.00
Temperature 1	20										
4231.79	10.64	114.64	4185.79	-212.89	464.14	7235307.1	2145981.7	510.64	510.64	114.64	0.00
4415.41	10.64	114.64	4366.26	-227.02	494.95	7235293.0	2146012.5	544.53	544.53	114.64	0.00
Start Drop			.000.20			00_00.0		000	000		0.00
4515.41	8.64	114.64	4464.84	-234.00	510.16	7235286.0	2146027.7	561.27	561.27	114.64	2.00
4615.41	6.64	114.64	4563.95	-239.54	522.24	7235280.4	2146039.8	574.56	574.56	114.64	2.00
4715.41	4.64	114.64	4663.46	-243.64	531.17	7235276.3	2146048.7	584.38	584.38	114.64	2.00
4815.41	2.64	114.64	4763.26	-246.28	536.93	7235273.7	2146054.5	590.72	590.72	114.64	2.00

# Bighorn Directional, Inc.

Axia Energy Three Rivers 32-32-720 Uintah County, Utah



Minimum of Curvature Slot Location: 7235519.99', 2145517.58' Plane of Vertical Section: 114.64°

Page: 2

			True	RECTAN	NGULAR	LAMB	ERT				
Measured	BORE	HOLE	Vertical	COORD	INATES	COORDI	N A T	Vertical	CLOSU	RES	Dogleg
Depth	Inc	Direction	Depth	North(-South)	) East(-West)	Υ	X	Section	Distance Di	rection	Severity
Feet	Degrees	Degrees	Feet		Feet	Feet	F	Feet	Feet D	Deg	Deg/100'
	J	Ü								Ü	Ü
4915.41	0.64	114.64	4863.21	-247.47	539.52	72( 5272.3	2146057.1	593.57	593.57	114.64	2.00
4947.20	0.00	114.64	4895.00	-247.54	539.68	723 72.4	2146057.3	593.75	593.75	114.64	2.00
Vertical Point											
5195.20	0.00	114.64	5143.00	-247.54	536.68	7. 35272.4	2146057.3	593.75	593.75	114.64	0.00
Garden Gulch					- <b>4</b> \ \ \ \ \ \ \	<b>\</b>					
5347.20	0.00	114.64	5295.00	-247.54	55. 68	7235272.4	2146057.3	593.75	593.75	114.64	0.00
TGR 3				_		MY					
6928.20	0.00	114.64	6876.00	-247.5	539.68	7235272.4	2146057.3	593.75	593.75	114.64	0.00
Top Uteland B	utte										
7078.20	0.00	114.64	7026.00	-24.54	539.68	7235272.4	2146057.3	593.75	593.75	114.64	0.00
Top Wasatch											
7378.20	0.00	114.64	732 5.00	-247.54	539.68	7235272.4	2146057.3	593.75	593.75	114.64	0.00
TD											
Final Station C	losure Dista	ınce: 593.75'	Di ction: 173.64								
			tur								
		111									

### MEMORANDUM OF SURFACE USE AGREEMENT

State:

Utah

County:

Uintah

Owner:

Kenneth Joe Batty

Operator:

Axia Energy, LLC, 1430 Larimer Street, Suite 400, Denver,

Colorado 80202

**Effective Date:** 

September 1, 2012

As of the Effective Date stated above, Owner, name Labove, executed and delivered to Operator, named above, a Surface Usa Agreement (the "SUA") in which Owner has granted Operator certain rights to accept the rands described below ("The Lands") for the purpose of exploring for any producing oil and gas from its oil and gas leases underlying the Lands and to construct additional and gas wells, and to construct and maintain associated producing producing pipelines. The Lands, all of which are situated in the state of the

Township 7S, Range 20E

Section 32 - 5 5/3 E/4

Section 33 - 1/2SW/4 & SW/4NW/4

Thi (SUA specific reminate upon the later of: (i) the expiration or termination of the underlying it and gas leases held by Operator, its successor or assigns; or (ii) upon completion or matricelamation on the lands by Operator, its successors or assigns.

This Memorandum of Surface Use Agreement is executed by Owner and operator and placed of record in the county in which the Lands are located for the purpose of placing all persons on notice of the existence of the Surface Use Agreement, which is not, at the request of both parties, being filed of record.

This Memorandum is signed by Owner and Operator, as of the date of the acknowledgment of their signatures below, but is effective for all purposes as of the Effective Date stated above.

OWNER:

.By:

Kenneth Joe Batty

OPERATOR:

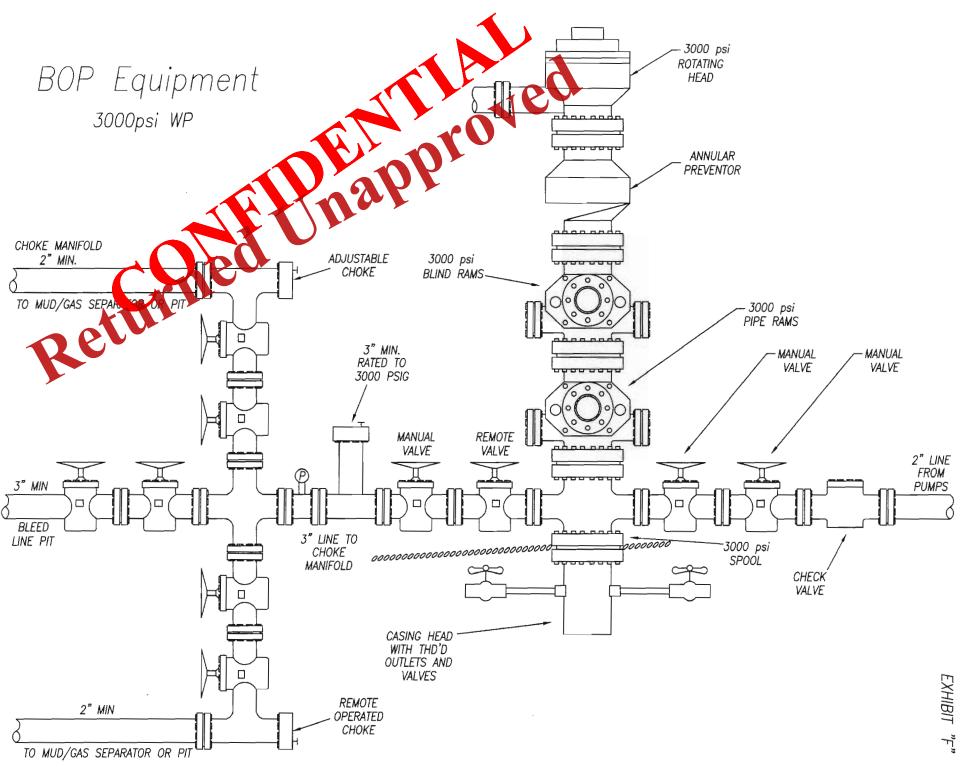
AXIA ENERGY, LLC

Bv

Tab McGinlev. Vice President of Land

## Acknowledgement

STATE OF UTAH )	
COUNTY OF <u>Untah</u>	
	/,
The foregoing instrument was acknow September, 2012 by Kenneth Joe E	rledged before me this//day of Batty.
	Notary Public
Witness my hand and official seal.	Commission #613255 My Commission Expired
My commission expires: $9-12-12$	September 12, 2015 Slate of Utah
	Court Naves Court
	Notary Public
STATE OF COLORADO	
	ALI
COUNTY OF DENVER	
The foregoing instructed was acknown	wledged before me this $23^{\circ}$ day of
President of Lance of A) a Evergy, LLC	appearing herein in his capacity as Vice
With part and official seal.	
My commission expires: 7/6//3	
Day Commission expires.	disability delication to the first of the fi
	Marci a. Winsten
Z HOTHRY Q	Notary Public
OS. PUBLIC	Address: 1430 Larimer Street
COF COL	Suite 400 Denver, Colorado 80202
Bly Commission Fruitag -7 // // 2	•





2580 Creekview Road Moab, Utah 84532 435/719-2018

April 10, 2013

Mrs. Diana Mason State of Utah Division of Oil Gas and Mining P.O. Box 145801 Salt Lake City, Utah 84114-5801

Ledivoled RE: Request for Exception to Spacing ree Rivers 32-32-720 Surface Location: SWNE, 1609' E Target Location: SWNE, 1872'FNL SLB&M, Uintah Co

#### Dear Diana:

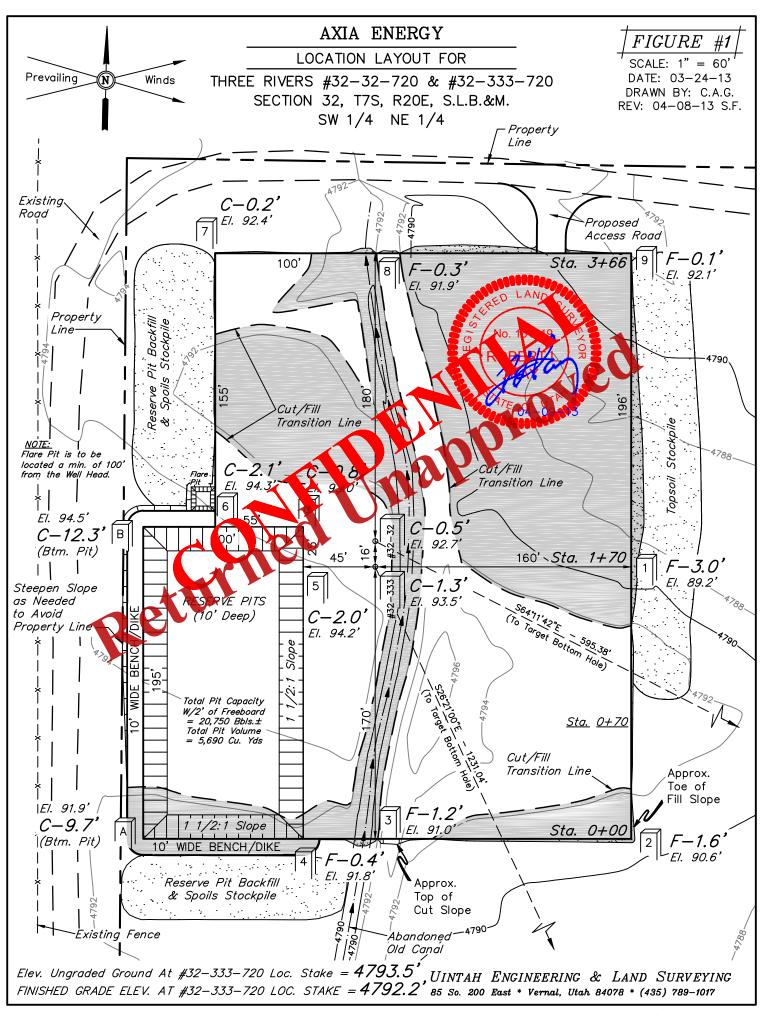
Axia Energy, LLC respectfully submit this request for exception to spacing (R649-3-11) based on geology since the well is a faced less than 460 feet to the drilling unit boundary. Axia Energy, LLC is the only deperated operator within 460 feet of the surface and target location as well as all points along the inter der well bore path and are not within 460 feet of any uncommitted tracts or a unit boundar

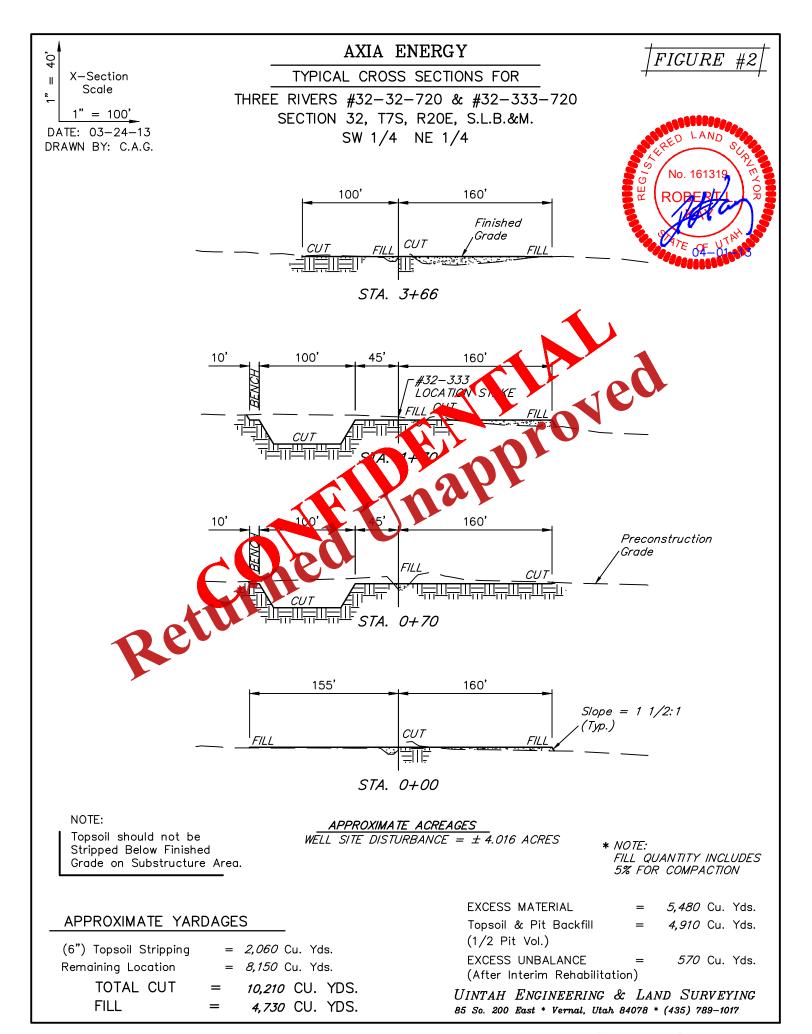
very much for your timely consideration of this application. Please feel free to contact Jess A. Peonio of Axia Energy, LLC at 720-746-5212 or myself should you have any questions or need additional information.

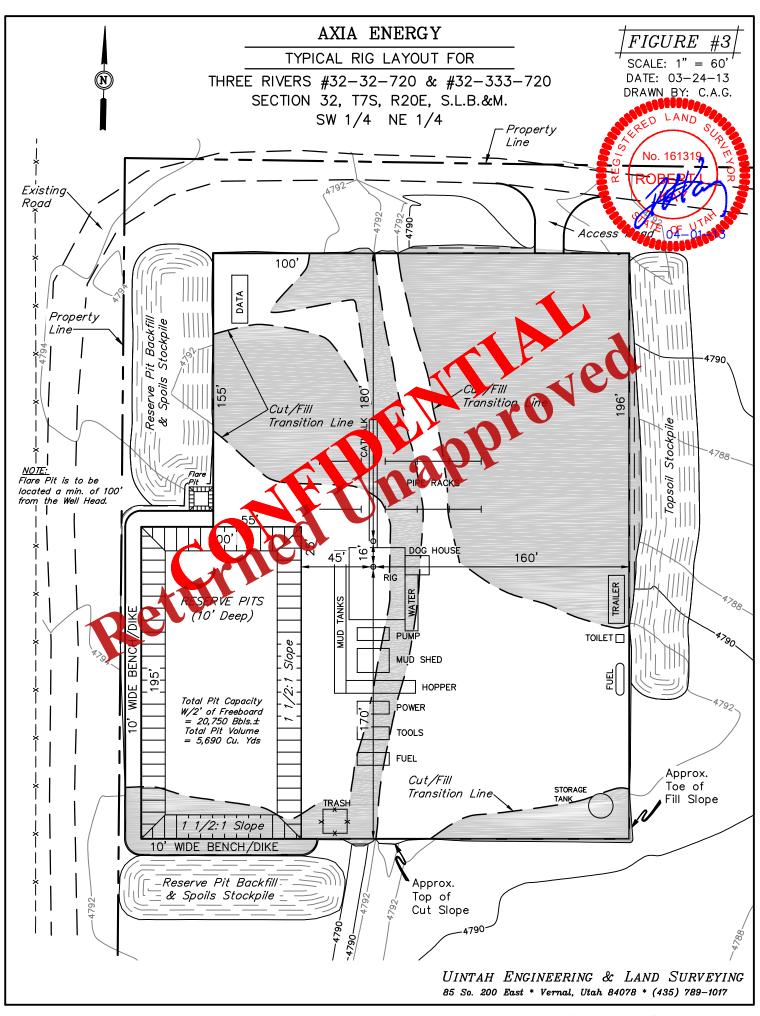
Sincerely,

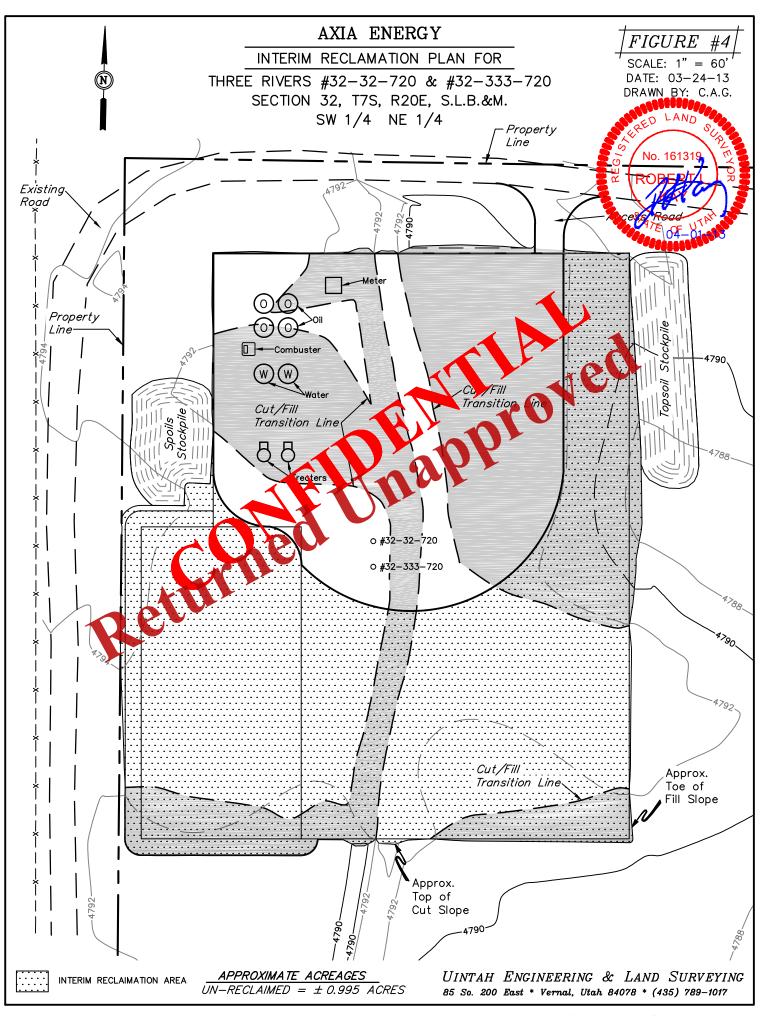
Don Hamilton Agent for Axia Energy, LLC

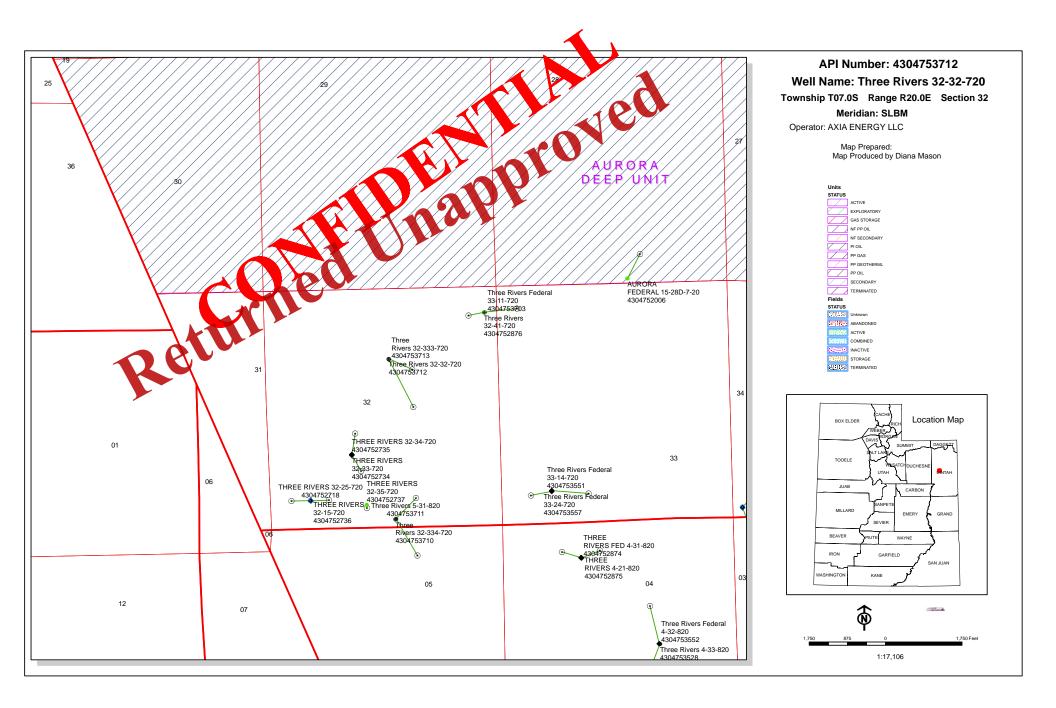
cc: Jess A. Peonio, Axia Energy, LLC

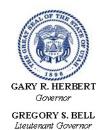












## State of Utah

#### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

May 02, 2013

AXIA ENERGY LLC 1430 Larimer Ste 400 Denver, CO 80202

Re: Application for Permit to Drill - UINTAH County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the Three Rivers 32-32-720 well, API 43047537120000 that was submitted April 10, 2013 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah

